

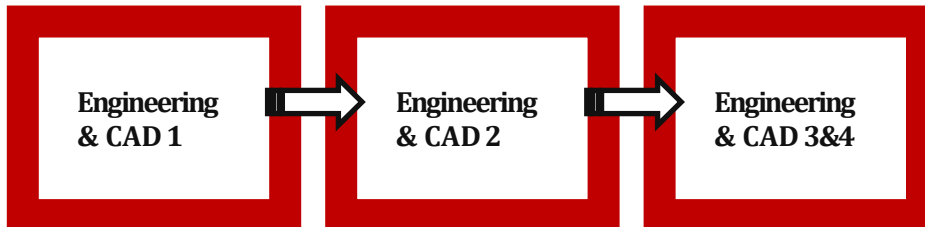
Engineering and Architecture: Engineering Pathway



CHICO HIGH SCHOOL

2019—2020

CTE Engineering Pathway Course Sequence



Course Descriptions

Engineering and CAD I

**Optional Butte College Credit*

This course introduces all **engineering design practices**. Students will create a variety of **manual technical drawings, geometric sketches** and learn **engineering lettering**. Students will learn **AutoCAD** software and create a variety of 2 dimensional and 3 dimensional projects in **Computer Aided Design (CAD)**. All projects will be prepared and submitted manually or digitally according to current industry standards. Students will also be introduced to **3D printing** and create models of projects created in **AutoCAD**.

Engineering and CAD II

**Optional Butte College Credit*

Students will use **AutoCAD Software** to produce **wire frame models, surface models** and **solid models** of various manufacturing projects. Each student will then complete assembly projects of actual models using **Solid Works Software**. All projects will be assembled according to **engineering industry standards**. **3D printers** will be used to create models of solid works projects.

Engineering and CAD III & IV

Students will use **Solid Works Software** to develop **3D models, plan views, assemblies, renderings** and **animations**. All projects will be **mechanical and manufacturing engineering** in nature. All projects will be **client based or part of the engineering internship program**. **3D printers** will be used to create models of solid works projects.

POST-SECONDARY OPTIONS:

Butte College

AS Degree in Engineering

CSU, Chico

Civil Engineering

Computer Engineering

Computer Information

Systems

Computer Science

Construction

HIGHLIGHTED CAREERS:

Engineer

Civil

Mechanical

Electrical

Computer

Project Engineer

Computer Engineer

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More information about this pathway: Students will work closely with business partners in the community. Local Engineers have students engage in client-based projects and internships in advanced courses. Students use state-of-the-art technology and industry-standard software.

Are professional certificates available? Students may test for AutoCAD and Solid Works certifications at Butte College.

Note: these templates are designed to help guide students. The order of some classes may vary and individual variation can be applied.

Career and Technical
Student Organization:



SkillsUSA
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